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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/711,767

10/04/2004

David W.M. Marr

34090.0273

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25928 7590 04/26/2007
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EXAMINER

KOCZO JR, MICHAEL

ART UNIT

PAPER NUMBER

3746

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

04/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|------------------------------|--|------------------------------------|--|
| Office Action Summary | Application No. 10/711,767 | Applicant(s) MARR ET AL. | |
| | Examiner Michael Koczko, Jr. | Art Unit 3746 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 2-4 and 10-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-9 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's arguments filed April 2, 2007 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 102

Claims 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Backhouse (US 6,318,970). See figures 9A to 9D which show a colloidal structure which is manipulated by magnetic fields to pump a fluid. The colloidal structure is formed of ultramicroscopic magnetic particles in a carrier liquid. Each particle is readable as "a solid colloidal particle". Each particle directly contacts a microfluidic stream to move the stream.

Claim Rejections - 35 USC § 103

Claims 5 to 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Backhouse (US 6,318,970). See figures 9A to 9D which show a colloidal structure which is manipulated by magnetic fields to pump a fluid. As shown in these figures, the space is a closed loop which is circular. Whether or not the portion of the space extending between the input structure and the output structure is along a straight line is deemed to be a matter of choice in design because it does not affect the operation of the pump. The structure of claim 6 is likewise deemed to be a matter of choice in design because it does not affect the operation of the pump.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Backhouse in view of either of Raj et al (US 5,958,282) or Mayes (US 6,815,063). Raj et al disclose that

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colloidal particles may be made spherical in shape (col. 1, l. 27). Mayes also discloses that colloidal particles may be made spherical in shape (col. 1, l. 52). In view of this teaching, it would have been obvious to form the ferromagnetic particles of Backhouse of a spherical shape.

Conclusion

Claims 2 to 4 and 10 to 28 stand withdrawn from further consideration as being drawn to non-elected inventions and species.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

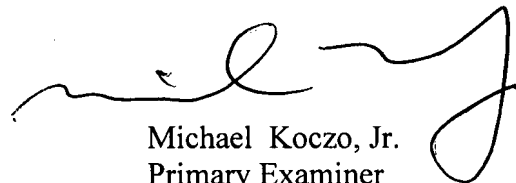
Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Koczo, Jr. whose telephone number is 571-272-4830. The examiner can normally be reached on M-Th; 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached at 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Michael Koczo, Jr.', is positioned above the printed name.

Michael Koczo, Jr.
Primary Examiner
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